

ART. XXXVIII.—*Second Note on the Maori Rat.*

By Prof. F. W. HUTTON.

[Read before the Otago Institute, 7th August, 1877.]

LAST JUNE the Museum received from Mr. Cocker a dried specimen of a rat found by him in a cave, along with some old Maori mats, etc., on Mount Benger. This specimen consists of the skeleton nearly complete, and the dried skin with a few hairs on it. A comparison of its skull with those from Shag Point, described in my former paper* left no doubt as to its being the true Maori rat, so that I am now able to add a little more to our knowledge of this animal. The following are the principal dimensions:—

	Inches.
Length of the skull	1·34
„ snout to root of tail	4·00 (about)
„ of tail	4·75 (perhaps rather more)
„ of hind foot	·87

There are thirty caudal vertebræ, but one or two at the end may be wanting. The hair on the belly is whitish, that on the back and sides mouse-grey, but all the colours may have been bleached. It will be seen that the measurements and colour correspond very well with a small specimen of the black rat (*Mus rattus*.)

ART. XXXIX.—*Notes on the New Zealand Myriopoda in the Otago Museum.*

By Prof. F. W. HUTTON.

Plate XI.

[Read before the Otago Institute, 5th June, 1877.]

Cermatia smithii, Newport. Ann. Nat. Hist. XIII., p. 96.*Hab.* Auckland.*Henicops impressus*, sp. nov.

Head broadly ovate, narrowed towards the front, with an elevated margin behind, and an impressed curved transverse line, convex backward, on the top before the eyes; space between the antennæ concave. Dental lamina with eight acute teeth. Antennæ tomentose, with 34–36 joints. Segments 15 (without the head), alternately large and small; but the small segment between the 7th and 8th, and between the 14th and 15th, absent; each segment with a raised margin. Above olive-brown, generally more or less marbled with black; legs pale bluish; feet yellow. Under surface of

* “Trans. N.Z. Inst.,” IX., p. 348.

head and region of anus reddish. Some scattered hairs on the legs. Length, .6 inch.

Hab. Dunedin and Queenstown.

It is astonishing with what rapidity this creature runs.

Cormocephalus violaceus, Newport. Linn. Trans., XIX., p. 424.

Hab. Wellington.

I have not seen any species of *Cormocephalus* from the South Island.

Himantarium ferrugineus, sp. nov. Fig. 1.

Head sub-quadrate, longer than broad; anterior margin slightly convex, sides nearly straight, posterior margin straight. Antennæ approximated, moniliform, finely pubescent. Body composed of about 110 segments, which retain nearly the same breadth throughout. Basal article of the last pair of legs deeply and coarsely punctate, both above and below. Præ-anal scale rather attenuated behind, and with a straight margin. Entirely pale red; antennæ rather lighter. Legs smooth. Length, 4.3 inches. Breadth, .1 inch.

Hab. Wellington and Inch Clutha.

One specimen has abnormal antennæ of only 12 joints, and the 10th and 11th joints are vasiform.

Himantarium morbosus, sp. nov. Fig. 2.

Head elongate, convex on the sides; anterior margin sinuated, posterior straight; its length equal to about twice its breadth. Antennæ approximated, moniliform, hairy. Body composed of about 40 segments. Basal article of the last pair of legs smooth above, punctured below. Præ-anal segment rather longer than broad. Præ-anal scale rounded. Pale reddish-yellow; head and antennæ ferruginous. Legs hairy. Length, 1.85 inch. Breadth, .07 inch near the head, tapering posteriorly.

Hab. Wellington and Dunedin.

Iulus (Spirostreptus) antipodarum, Newport; Dieff. N.Z., II., p. 270. Fig. 3.

Head smooth, emarginate anteriorly, deeply excavated behind the antennæ. Antennæ of seven joints, the last very small, the third rather longer than the second, the 4th, 5th, and 6th subequal, vasiform, contracted at the base; all the joints from the 3rd tomentose. Eye-patch sub-elliptical, eyes in three rows of 8, 7, and 6 respectively. Segments 54. The first rounded in front, with the lateral points blunt. Latero-posterior portion of each segment with fine distant oblique striæ, which are more distinct on the anterior portion of the body than on the posterior, and are very indistinct in the young. Remainder of segments smooth, with a shallow pore at each side. Præ-anal segment rounded. Variable in colour

from pale to dark brown, with the segments sometimes uniform, sometimes darker in front. Legs yellowish. Length, 1·3 inch.

Hab. Wellington, Dunedin, Clyde, Preservation Inlet.

A very common species. When put into alcohol it stains it a dark purple.

Iulus (Spirostreptus) striatus, sp. nov.

Head smooth, emarginate anteriorly. Antennæ tomentose, 7-jointed, the 2nd the longest, the 3rd to the 6th sub-equal. Segments 47, the posterior half of each with fine distant longitudinal striæ on the dorsal and lateral surfaces; anterior portion smooth. Lateral margin of first segment rounded. Præ-anal segment terminating in a slightly obtuse rounded point, not passing the anal valves. Upper surface brown, paler below. Length, ·4 inch.

Hab. Dunedin.

Iulus berardi, Walck. (Gervais, Apteres, IV., p. 333), is a very different species, which I have never seen.

Polydesmus (Oxyurus) serratus, sp. nov.

Antennæ tomentose, 7-jointed; the 2nd and 3rd equal, and longer than the 4th and 5th, the 7th very small. Top of the head pentagonal; face with a few scattered hairs, smooth. Segments smooth, the sides of each produced into a strong keel, which extends backward on each side in an acute curved angle. Præ-anal segment terminating in a blunt point, with scattered white hairs; the inferior semicircular slightly toothed. Dirty white, with a more or less distinct brown dorsal stripe; under surface white. Length, ·4 inch.

Hab. Dunedin.

Polydesmus (Oxyurus) worthingtoni, sp. nov.

Antennæ tomentose, 7-jointed; the 2nd much longer than the 3rd or 4th, which are subequal. Segments 18 or 19, the same as in the last, but the angles on each side spring more suddenly from the posterior margin. Præ-anal plates as in the last. Dark reddish-brown. Length, ·65 inch.

Hab. Queenstown.

Named after Mr. J. S. Worthington, of Queenstown.

Polydesmus (Strongylosoma) gervaisii, Lucas, Hist. Anim. Artic., Apt., p. 525; Gervais, Apteres, IV., p. 118. Fig. 4.

Hab. Dunedin, Preservation Inlet.

New Zealand specimens agree so well with the description of this Australian and Tasmanian species, that I have no hesitation in considering it as the same. *P. novaræ*, Humbert and Sauttare (Verhandl. Zool. Bot. Gesellsch. in Wien, 1869, p. 689), is very closely allied, if not identical with

it. It is very common about Dunedin, where we find not only specimens resembling the type in colour, but also a variety of a pale rose-red, marbled with white, and with white legs. The specimens from Preservation Inlet are entirely blackish-brown.

The length is about an inch, and the number of segments is 19, not including the head and anus. It has 29 pairs of legs, the 2nd, 3rd, and 4th segments having only one pair. The 2nd and 3rd joints of the antennæ are equal and longer than the 4th, 5th, and 6th.

Polydesmus (Strongylosoma) macrocephala, sp. nov.

Antennæ 7-jointed, all finely pubescent; 4th and 5th the shortest. First segment smaller than the head; lateral margins rounded. Segments smooth, very slightly keeled on each side. Præ-anal segment terminating in a blunt point without any hairs; the inferior semi-circular with a longitudinal keel. White with pale brown spots and vermiculations. Length, .6 inch.

Hab. Dunedin.

Craspedosoma trisetosa, sp. nov. Fig. 5.

Antennæ 7-jointed, reaching back to the 7th segment; the first and last joints short, the 3rd longest. Eye-patch pyriform; eyes in four rows, of 6, 6, 5, and 4 respectively. Segments 32, finely granulated on the back, and with a depressed longitudinal line down the centre; the lateral margins straight. Each segment with three long bristles on each side, springing from tubercles, of which the lowest is the largest, and the highest the smallest. Antennæ and legs with short hairs. Head yellowish, with a dark band between the antennæ. Eyes and antennæ dark brown. Segments blackish-brown, each with oblique bands of olive before and behind the setiferous papillæ. Legs pale yellow, marked with dark brown on the last two or three joints. Occasionally it is brown, marbled with olive. Length 1 inch.

Hab. Dunedin.

Spherotherium leiosomus, sp. nov. Fig. 6.

Head sparingly, coarsely, irregularly punctured, with a deep central transverse depression at the posterior margin, and a few short bristles in front. Antennæ slightly setose, six-jointed; the last joint cylindrical, rounded at the tip. Nuchal plate smooth, but uneven, with a slight central depression in front, and an anterior marginal ridge. Dorsal plates covered with very fine shallow punctures. First dorsal segment with a distinct lateral marginal ridge. Last dorsal segment arched, slightly compressed, its margin entire and not ridged. Intermediate segments with the lateral extremities broad, rounded in front and rectangular behind; with a rough

triangular excavation at the anterior lateral angle. The tenth and eleventh segments broader than those before them. Black, shining, more or less marbled with dark testaceous. Length, .75 inch. Breadth, .4 inch. Width of head, .2 inch. Depth of head .12 inch.

Hab. Dunedin.

This species differs from *S. delacyi* (White, Ann. Nat. Hist., 3 Ser., III., p. 406), which I have not seen, in its colour, in not being attenuated posteriorly, and in the head being much broader and shorter. In other respects the two are very similar.

APPENDIX.

As Humbert and Saussure's paper, in which the Myriopoda taken from New Zealand by the Novara Expedition are described, is not very accessible in New Zealand, I subjoin their descriptions.

Polydesmus (Oxyurus) haastii.

Fusco-niger, corpore antice attenuato, plus minus granulato; carinis retrorsum uncinatis, poris lateralibus; dorso antice valde arcuato, dein minus convexo; metazonites sulco obsoleto partitis, pone sulcum serie transversa areolarum sex ornatis. Fem., long. 25 mill.; larg. 4 mill.

Hab. Auckland, Waikato River.

Polydesmus (Strongylosoma) novaræ.

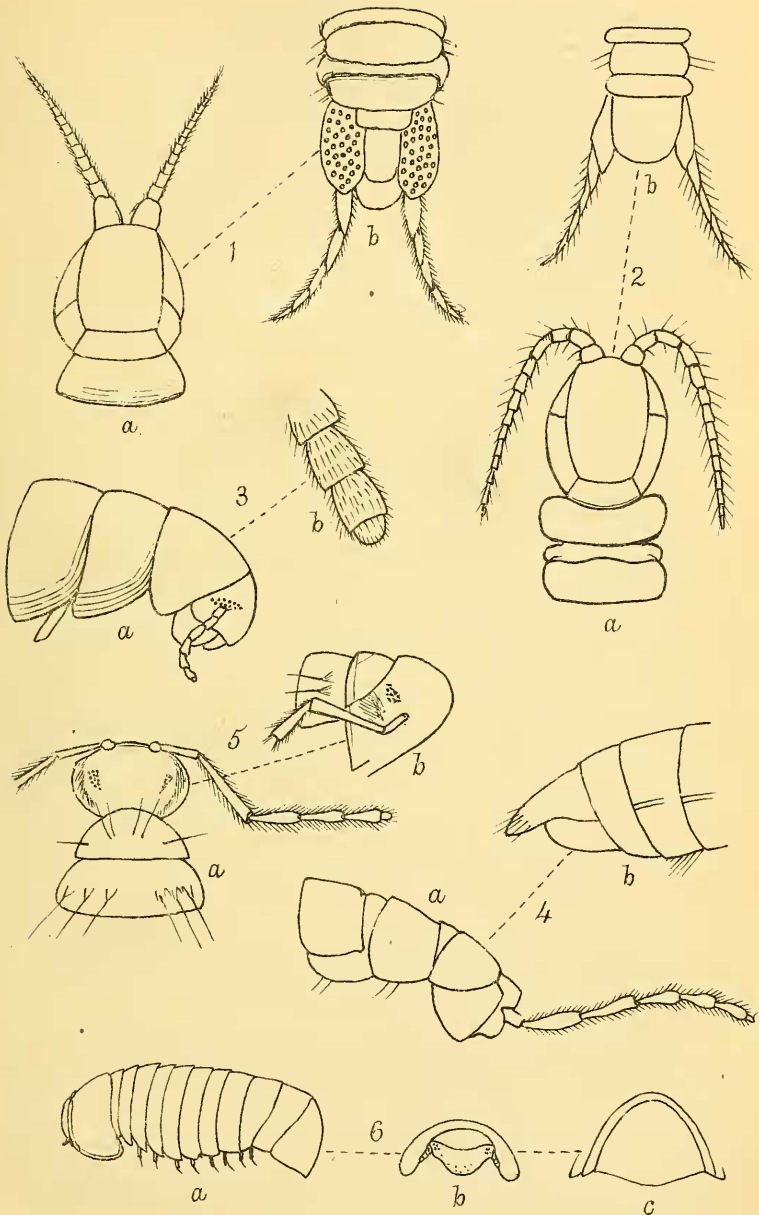
Fusco-castaneus, lævis, nitidus; carinis pedibusque flavidis; primo segmento antice valde arcuato, lobis lateralibus antice sulco marginali; segmento secundo cingulum efficiente, utrinque quadratim secto, margine reflexo, carinam elongatum linearem efficiente; carinis reliquis in media altitudine corporis sitis, crassiusculis, postice subangulatis, sed non productis; poris lateralibus; segmento præ-anali apice in processum lamellarem et obtusum producto; metazonites sulco profundo transversali partitis. Long., 18 mill.; larg., 2.5 mill.

Hab. Auckland.

Polydesmus (Icosidesmus) hochstetteri.

Albidus, depressus, nitidus; corpore antice et postice attenuato; antennis gracilibus, elongatis, articulis 2^o et 3^o longioribus; primo segmento semi-orbiculari, angulis rotundatis, segmentis 2-4 minutis, tertio minore; metazonites transversis, utrinque rotundatis, margine postico crasso, carinis parum prominulis; tuberculis nullis; poris minimis, superis, marginalibus; segmento præ-anali minuto, trigonali, lamina præ-anali trapizina. Long., 20 mill.; larg., 2.7 mill.

Hab. Auckland.



MYRIAPODA.

EXPLANATION OF PLATE XI.

Fig. 1. <i>Himantidium ferrugineus</i>	.. a anterior extremity
	.. b posterior extremity
„ 2. <i>Himantidium morbosus</i>	.. a anterior extremity
	.. b posterior extremity
„ 3. <i>Iulus antipodarum</i>	.. a profile of anterior end
	.. b extremity of antenna
„ 4. <i>Polydesmus gervaisii</i>	.. a profile of anterior end
	.. b profile of posterior end
„ 5. <i>Craspedosoma trisetosa</i>	.. a anterior end from above
	.. b profile of anterior end
„ 6. <i>Sphacrotherium leiosomus</i>	.. a profile
	.. b head, nuchal plate and first segment from the front
	.. c last two dorsal segments from behind.

ART. XL.—Contributions to the Conchology of New Zealand.

By Prof. F. W. HUTTON.

[Read before the Otago Institute, 9th October, 1877.]

Ianthina iricolor, Reeve ; Conch. Ic., fig. 23.

Specimens have been sent me from the North Island by Mr. T. Kirk.

Trophon dubius, Hutton ; Jour. de Conch., 1877.

Ovato-fusiform, thick ; whorls seven, convex, rudely spirally ribbed, those of the spire whorls transversely ribbed. Aperture oval ; canal very short, not bent, and rounded anteriorly. Covered with a greenish-brown persistent epidermis. Interior dark purple ; canal and anterior portion of columella whitish. L. .7 ; B. .4.

Hab. Auckland—Mr. T. F. Cheeseman.*Fusus spiralis*, Adams ; P.Z.S.*F. pensum*, Hutton ; Cat. Mar. Moll.*Fusus incisus*, Gould.

Gould gives the habitat as uncertain, “probably New Zealand.” I have seen no specimens.

“Shell of medium size and moderate thickness, of an elongated ovate form, of a cinereous brown colour, everywhere encircled with narrow, deeply impressed striæ of a more decided brown colour than the interspaces, about ten on the penultimate whorl. The apical whorls have also eight or nine longitudinal undulations. Whorls six or seven, convex, the last two-thirds the length of the shell, tapering about equally each way ; siphonal beak short, a little recurved. Aperture one half the length of the shell, narrow, suboval ; outer lip regularly arcuate, crenulated by the impressed lines,